# **GTM**

# CORPORATION ISSUED DATE :2005/12/23 REVISED DATE :

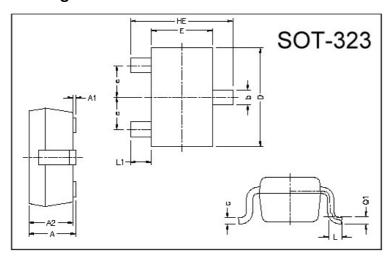
## GSMBD2004

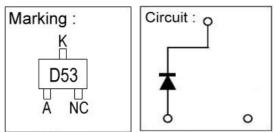
## SURFACE MOUNT, SWITCHING DIODE **VOLTAGE 300V, CURRENT 0.225A**

#### **Description**

The GSMBD2004 is designed for ultra high speed switching.

#### **Package Dimensions**





REF.	Millimeter		REF.	Millimeter	
	Min.	Max.	NEF.	Min.	Max.
Α	0.80	1.10	L1 0.42 RE		REF.
A1	0	0.10	L	0.15	0.35
A2	0.80	1.00	b	0.25	0.40
D	1.80	2.20	С	0.10	0.25
Е	1.15	1.35	е	0.65 REF.	
H	1.80	2.40	Q1	0.15	BSC.

#### Absolute Maximum Ratings (At TA = 25°C unless otherwise specified)

Parameter	Symbol	Ratings	Unit	
Repetitive Peak Reverse Voltage	VRRM	300	V	
Continuous reverse voltage	VR(VRWM)	240	V	
RMS Reverse Voltage	VR(RMS)	170	V	
Forward Continuous Current	lғм	225	mA	
Non-Repetitive Peak Forward surge Current @Tp =1.0us	Irou	4	Λ	
@Tp=1.0s	IFSM	1	A	
Typical Junction Capacitance between Terminal (Note1)	CJ	5.0	pF	
Max. Reverse Recovery Time (Note2)	Trr	50	nSec	
Power Dissipation	PD	350	mW	
Thermal Resistance Junction to Ambient Air	Reja	357	°C/W	
Operation and Storage Temperature Range	TJ, TSTG	-65 ~ +150	$^{\circ}\!\mathbb{C}$	

### **Electrical Characteristics** (At TA = 25°C unless otherwise noted)

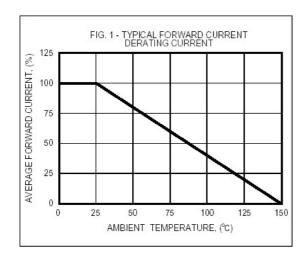
Characteristics	Symbol	Min.	Max.	Unit	Test Conditions
Reverse Breakdown Voltage	BVR	300	-	V	IR=100uA
	VF		0.85	V	IF=20mA
Forward Voltage		-	1	V	IF=100mA
		-	1.25	V	IF=225mA
Reverse Current	lr	-	100	nA	VR=240V, TA=25°C
neverse Guirent			100	uA	VR=240V, TA=150°C

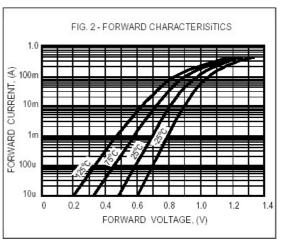
Notes: 1. Measured at 1.0 MHz and applied reverse voltage of 0 volts.

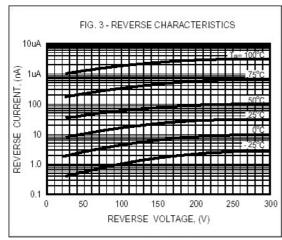
- 2. Measured at applied forward current of 30mA, reverse current of 30mA,  $R_L=100\Omega$  and recovery to  $I_{RR}=-3mA$ .
- 3. ESD sensitive product handling required.

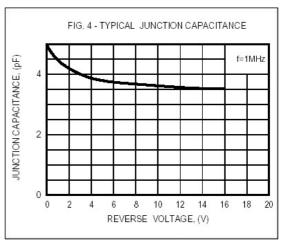
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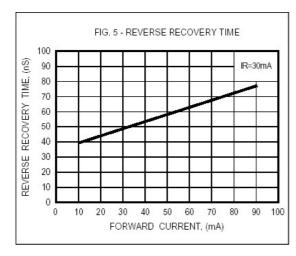
#### **Characteristics Curve**

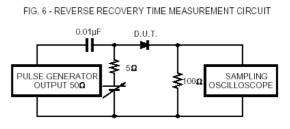












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